

REMARKS

This Amendment responds to the Final Office Action mailed August 24, 2007 in the above-identified application. The amendments do not raise new issues or require extensive consideration. Accordingly, entry of the Amendment and allowance of the application are respectfully requested.

Claims 1-3, 6-15 and 18-24 are pending in the application. By this Amendment, independent claims 1, 13 and 24 have been amended. The amendments find clear support in the original application at least at page 7, lines 11-19. No new matter has been added.

The Examiner has rejected claims 1-3, 6, 7, 9-15, 18, 19 and 21-24 under 35 U.S.C. §103(a) as unpatentable over Levin (US 6,639,906) in view of Gao et al. (US 2003/0186657). Claims 8 and 20 are rejected under 35 U.S.C. §103(a) as unpatentable over Levin in view of Gao et al., further in view of Komatsu (US 6,816,542). The rejections are respectfully traversed.

Levin describes a system for performing digital receive processing from multiple signals received over the same RF band (col. 3, lines 27-29). A demodulator shown in Fig. 5 includes XOR banks 204-210 which generate offset despread data (col. 8, lines 29-39). An early interpolation circuit 212, an on-time interpolation circuit 214 and a late interpolation circuit 216 interpolate the outputs of XOR banks 204-210 (col. 8, line 66 to col. 9, line 30).

Gao et al. relates to a method for estimating a channel of a mobile radiotelephone channel during multipath reception. An interpolation of the channel coefficients which are determined on the basis of the respective impulse response, in two adjacent time intervals, is carried out. Before interpolation, the individual components of the impulse response are examined to determine whether they belong to one and the same transmission path, and interpolation is only carried out for the components to which this applies (Abstract).

Amended claim 1 is directed to a method for processing a spread spectrum baseband signal, comprising: despread samples of the baseband signal with two or more instances of a

spreading code, the instances of the spreading code successively offset relative to the signal samples, to provide two or more despread results, and interpolating the two or more despread results based on a previously estimated finger location to provide a symbol estimate, wherein interpolating the two or more despread results includes selecting the despread results around the previously estimated finger location and selecting interpolation coefficients based on the previously estimated finger location.

Levin contains no disclosure or suggestion of “selecting the despread results around the previously estimated finger location and selecting interpolation coefficients based on the previously estimated finger location” as required by amended claim 1. Levin, by contrast, discloses a demodulator which uses fixed interpolation coefficients. The Examiner acknowledges that Levin fails to disclose this limitation (Office Action, page 3, third paragraph).

Gao does not contain the teachings that are lacking in Levin. Gao discloses a method for estimating a mobile radio channel, or finger location (¶¶ 001, 002, 0011 and 0012). By contrast, the claimed invention relates to despreading at the *previously estimated* finger location. The interpolation described by Gao relates to estimation of finger location and not to providing a symbol estimate, as recited by amended claim 1. In fact, the estimated channel, or finger location, described by Gao may be used as an input to the claim 1 method for providing a symbol estimate. Accordingly, neither Levin nor Gao discloses or suggests “selecting the despread results around the previously estimated finger location and selecting interpolation coefficients based on the previously estimated finger location” as required by amended claim 1. For at least these reasons, amended claim 1 is clearly and patentably distinguished over Levin in view of Gao, and withdrawal of the rejection is respectfully requested.

Claims 2, 3 and 6-12 depend from claim 1 and are patentable over the cited references for at least the same reasons as claim 1.

Amended claim 13 is directed to apparatus for processing a spread spectrum baseband signal and contains apparatus limitations that parallel the method limitations of claim 1. Gao and

Levin, taken individually or in combination, do not disclose or suggest “means for selecting the despread results around the previously estimated finger location and means for selecting interpolation coefficients based on the previously estimated finger location”, as required by amended claim 13. For at least these reasons and the reasons discussed above, amended claim 13 is clearly and patentably distinguished over Levin in view of Gao, and withdrawal of the rejection is respectfully requested.

Claims 14, 15 and 18-23 depend from claim 13 and are patentable over the cited references for at least the same reasons as claim 13.

Amended claim 24 is directed to apparatus for processing a spread spectrum baseband signal and requires, in part, means for interpolating two or more despread results based on a previously estimated finger location to provide a symbol estimate, wherein the means for interpolating the two or more despread results includes means for selecting the despread results around the previously estimated finger location and means for selecting interpolation coefficients based on the previously estimated finger location.

Levin and Gao do not disclose or suggest means for selecting interpolation coefficients based on a previously estimated finger location, as required by amended claim 24. Instead, Levin discloses interpolation with fixed filter coefficients, and Gao discloses a method for estimating finger locations. For at least these reasons and the reasons discussed above, amended claim 24 is clearly and patentably distinguished over Levin in view of Gao, and withdrawal of the rejection is respectfully requested.

Based upon the above discussion, entry of the Amendment and allowance of the application are respectfully requested.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the application in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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